

Illinois Environmental Protection Agency  
Bureau of Air, Permit Section  
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Project Summary for an Application from  
Medline Industries, Inc. for a  
Federally Enforceable State Operating Permit (FESOP) for  
1160 South Northpoint Boulevard  
Waukegan, Illinois 60085

Site Identification No.: 097190AFG  
Application No.: 04120009

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## **I. INTRODUCTION**

Medline Industries, Inc. - Northpoint Services Division has applied for a Federally Enforceable State Operating Permit (FESOP) for its sterilization facility at 1160 South Northpoint Boulevard in Waukegan. The source has been operating under a Clean Air Act Permit. This facility requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the permit that it would propose to issue for the facility. However, before issuing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

## **II. SOURCE DESCRIPTION**

Medline Industries, Inc. is located at 1160 South Northpoint Boulevard in Waukegan. The Source provides sterilization services to a variety of medical product manufacturers using ethylene oxide sterilizers. This source typically uses more than 10 tons of ethylene oxide on an annual basis. Sterilization facilities using 1 ton or more of ethylene oxide are subject to the National Emission Standards for Hazardous Air Pollutants 40 CFR 63 Subpart O: Ethylene Oxide Emissions Standards for Sterilization Facilities. Medline Industries uses a catalytic oxidizer and uses 3 acid-water scrubbers to comply with 40 CFR 63 Subpart O.

The principal air contaminant emitted from the facility is ethylene oxide which is the main raw material used in the sterilization process. Ethylene oxide is a hazardous air pollutant and is also a volatile organic material.

The catalytic oxidizer is an air pollution control device used to control ethylene oxide emissions. The catalytic oxidizer is natural gas fired. Nitrogen oxides are formed thermally by a combination of oxygen and nitrogen in the air at a temperature at which fuel is burned.

In addition, sulfur dioxides (SO<sub>2</sub>), carbon monoxide (CO), particulate matter (PM) and volatile organic material (VOM) are emissions formed by combustion processes. CO is formed by the incomplete combustion of fuel. SO<sub>2</sub> emissions are mostly generated during the combustion of fuel oil.

## **III. GENERAL DISCUSSION**

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has been operating this plant under a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not

need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for NO<sub>x</sub>, 10 tons for an individual HAP and 25 tons for combined HAPs.

#### **IV. APPLICABLE EMISSION STANDARDS**

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. This source is subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart O, Ethylene Oxide Emission Standards for Sterilization Facilities. These standards require that the source reduce ethylene oxide emissions by at least 99%. These emission standards represent the basic requirements for sources in Illinois. The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

#### **V. CONTENTS OF THE PERMIT**

The permit that the Illinois EPA is proposing to issue will identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit would also set limitations on monthly and annual ethylene oxide usage. Since these items are limited, therefore the air emissions are limited.

The permit conditions require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and the plant's emissions are being properly controlled.

#### **VI. REQUEST FOR COMMENTS**

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to issue the permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.